

RECEIVED
CENTRAL FAX CENTER
APR 20 2010

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

IN THE CLAIMS

Please amend the claims of the present application under the provisions of 37 C.F.R. §1.121(c), as indicated below:

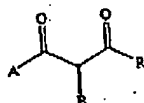
1. (Cancelled):

2. (Previously presented): The derivatives according to claim 17, characterized in that the compound having formula (I) are present as tautomeric forms, pure or as blends of tautomeric forms, in any proportion whatsoever,

3-12 (Cancelled):

13. (Previously presented): Herbicidal compositions containing, one or more compounds having general formula (I):

(I)



wherein A, B and R have the meanings according to claim 17, possibly also as a blend of tautomers.

14. (Previously presented): The herbicidal compositions according to claim 13, including other herbicides, fungicides, insecticides, acaricides, fertilizers, compatible with the compounds having general formula (I).

15. (Original): The herbicidal compositions according to claim 14, characterized in that the additional herbicides are selected from:
acetochlor, acifluorfen, acetonifene, AKH-7088, alachlor, alloxymid, ametryn, amicarbazone, amidosulfuron, amitrole, anilofos, asulam, atrazine, azafenidin,

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

azimsulfuron, aziprotryne, BAS 670 H, BAY MKH 6561, beflubutamid, benazolin, benfluralin, benfuresate, bensulfuron, bensulide, bentazone, benzfendizone, benzobicyclon, benzofenap, benzthiazuron, bifenox, bilanafos, bispyribac-sodium, bromacil, bromobutide, bromofenoxim, bromoxynil, butachlor, butafenacil, butamifos, butenachlor, butralin, butoxydim, butylate, cafenstrole, carbetamide, carfentrazone-ethyl, chlomethoxyfen, chloramben, chlorbromuron, chlorbufam, chlorflurenol, chloridazon, chlorimuron, chlormitrofen, chlorotoluron, chloroxuron, chlorpropham, chlorsulfuron, chlorthal, chlorthiamid, cinidon ethyl, cinmethylin, cinosulfuron, clethodim, clodinafop, clomazone, clomeprop, clopyralid, cloransulam-methyl, cumyluron (JC-940), cyanazine, cycloate, cyclosulfamuron, cycloxydim, cyhalofop-butyl, 2,4-D, 2,4-DB, daimuron, dalapon, desmedipham, desmetryn, dicamba, dichlobenil, dichlorprop, dichlorprop-P, diclofop, diclosulam, diethatyl, difenoxuron, difenzoquat, diflufenican, diflufenzopyr, dimefuron, dimepiperate, dimethachlor, dimethametryn, dimethenamid, dinitramine, dinosseb, dinoseb acetate, dinoterb, diphenamid, dipropetryn, diquat, dithiopyr, 1-diuron, eglinazone, endotal, EPTC, esprocarb, ethalfluralin, ethametsulfuron-methyl, ethidimuron, ethiozin (SMY 1500), ethofumesate, ethoxyfen-ethyl (HC-252), ethoxysulfuron, etobenzanid (HW 52), fenoxaprop, fenoxaprop-P, fentrazamide, fenuron, flamprop, flamprop-M, flazasulfuron, florasulam, fluazifop, fluazifop-P, fluazolate (JV 485), flucarbazone-sodium, fluchloralin, flufenacet, flufenpyr ethyl, flumetsulam, flumiclorac-pentyl, flumioxazin, flumipropin, fluometuron, fluoroglycofen, fluoronitrofen, flupoxam, fluproanate, flupyrsulfuron, flurenol, fluridone, flurochloridone, fluroxypry, flurtamone, fluthiacet-methyl, fomesafen, foramsulfuron, fosamine, furyloxyfen, glufosinate, glyphosate, halosulfuron-methyl, haloxyfop, haloxyfop-P-methyl, hexazinone, imazamethabenz, imazamox, imazapic, imazapyr, imazaquin, imazethapyr, imazosulfuron, indanofan, iodosulfuron, ioxynil, isopropalin, isoproturon, isouron, isoxaben, isoxachlortole, isoxaflutole, isoxapyrifop, KPP-421, lactofen, lenacil, linuron, LS830556, MCPA, MCPA-thioethyl, MCPB, mecoprop, mecoprop-P, mefenacet, mesosulfuron, mesotrione, metamiltron, metazachlor,

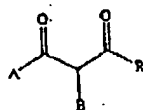
Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

methabenzthiazuron, methazole, methoprotryne, methyldymron, metobenzuron, metobromuron, metolachlor, S-metolachlor, metosulam, metoxuron, metribuzin, metsulfuron, molinate, monalide, monolinuron, naproanilide, napropamide, naptalam, NC-330, neburon, nicosulfuron, nipyraclufen, norflurazon, orbencarb, oryzalin, oxadiargyl, oxadiazon, oxasulfuron, oxaziclomefone, oxyfluorfen, paraquat, pebulate, pendimethalin, penoxsulam, pentanochlor, pentoxazone, pethoxamid, phenmedipham, picloram, picolinafen, piperophos, pretilachlor, primisulfuron, prodiamine, profluazol, proglinazine, prometon, prometryne, propachlor, propanil, propaquizafop, propazine, propham, propisochlor, propyzamide, prosulfocarb, prosulfuron, pyraclonil, pyraflufen-ethyl, pyrazogyl (HAS-961), pyrazolynate, pyrazosulfuron, pyrazoxyfen, pyribenzoxim, pyributicarb, pyridafol, pyridate, pyriftalid, pyriminobac-methyl, pyriothiobac-sodium, quinclorac, quinmerac, quizalofop, quizalofop-P, rimsulfuron, sethoxydim, siduron, simazine, simetryn, sulcotrione, sulfentrazone, sulfometuron-methyl, sulfosulfuron, 2,3,6-TBA, TCA-sodium, tebutam, tebuthiuron, tepraloxydim, terbacil, terbutometon, terbuthyl-azine, terbutryn, thenylchlor, thiazafluron, thiazopyr, thidiazimin, thifensulfuron-methyl, thiobencarb, tiocarbazil, tioclorim, tralkoxydim, tri-allate, triasulfuron, triaziflam, tribenuron, triclopyr, trietazine, trifloxysulfuron, trifluralin, triflusulfuron-methyl, tritosulfuron, UBI-C4874, vernolate.

16. (Original): The compositions according to any of the claims 13-15, characterized in that the concentration of active substance ranges from 1 to 90%.

17. (Currently amended): Derivatives of 1,3-diones having general formula (I):

(I)



Application Number: 10/573,052
 Examiner: HAVLIN, ROBERT H

wherein:

-A represents:

an aryl group optionally substituted by one or more substituents selected from halogen; NO₂; CN; CHO; OH; linear or branched C₁-C₆ alkyl; linear or branched C₁-C₆ haloalkyl; linear or branched C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₁-C₆ cyanoalkyl; C₂-C₆ alkoxyalkyl; C₂-C₆ alkylthioalkyl; C₂-C₆ alkylsulfinylalkyl; C₂-C₆ alkylsulfonylalkyl; C₂-C₆ haloalkoxyalkyl; C₂-C₆ haloalkylthioalkyl; C₂-C₆ haloalkylsulfinylalkyl; C₂-C₆ haloalkylsulfonylalkyl; C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy optionally substituted with a group selected from C₁-C₄ alkoxy or C₁-C₄ haloalkoxy; C₂-C₆ alkylthioalkoxy; C₂-C₆ haloalkylthioalkoxy; C₃-C₁₂ dialkoxyalkyl; C₃-C₁₂ dialkylthioalkyl; C₃-C₁₂ dialkylthioalkoxy; C₃-C₁₂ dialkoxyalkoxy; C₂-C₆ haloalkoxyhaloalkoxy; C₃-C₁₀ alkoxyalkoxyalkyl; C₂-C₆ alkenyl; C₂-C₆ haloalkenyl; C₂-C₆ alkenyloxy; C₂-C₆ haloalkenyloxy; C₃-C₈ alkenyloxyalkoxy; C₃-C₈ haloalkenyloxyalkoxy; C₂-C₆ alkynyl; C₂-C₆ haloalkynyl; C₂-C₆ alkynyloxy; C₂-C₆ haloalkynyloxy; C₃-C₈ alkynyloxyalkoxy; C₃-C₈ haloalkynyloxyalkoxy; C₃-C₁₂ acylaminoalkoxy; C₂-C₈ alkoxyiminoalkyl; C₂-C₈ haloalkoxyiminoalkyl; C₃-C₈ alkenyloxyiminoalkyl; C₃-C₈ haloalkenyloxyiminoalkyl; C₃-C₈ alkynyloxyiminoalkyl; C₃-C₈ haloalkynyloxyiminoalkyl; C₅-C₁₀ alkoxyalkynyloxy; C₆-C₁₂ cycloalkylideneiminoalkoxyalkyl; C₆-C₁₂ dialkylideneiminoalkoxyalkyl; —S(O)_mR₁; —OS(O)_nR₁; —SO₂NR₂R₃; —CO₂R₄; —COR₅; —CONR₆R₇; —CSNR₈R₉; —NR₁₀R₁₁; —NR₁₂COR₁₃; —NR₁₄CO₂R₁₅; —NR₁₆CONR₁₇R₁₈; —PO(R₁₉)₂; —Q; —ZQ₁; —(CR₂₀R₂₁)pQ₂; —Z(CR₂₂R₂₃)pQ₃; —(CR₂₄R₂₅)pZQ₄; —(CR₂₆R₂₇)pZ(CR₂₈R₂₉)qQ₅; —(CR₃₀R₃₁)pZ(CR₃₂R₃₃)qZ₁Q₆; —Z₂(CR₃₄R₃₅)p(C=Y)T; —Z₃(CR₃₆R₃₇)v(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;

or it represents a heterocyclic group selected from pyridyl; pyrimidyl; quinolinyl; pyrazolyl; thiazolyl; oxazolyl; thienyl; furyl; benzothienyl; dihydrobenzothienyl;

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

benzofuranyl; dihydrobenzofuranyl; benzoxazolyl; benzoxazolonyl; benzothiazolyl;
benzothiazolonyl; benzoimidazolyl; benzoimidazolonyl; benzotriazolyl;
chromanonyl; chromanyl; thiochromanonyl; thiochromanyl;
3a,4-dihydro-3H-indeno[1,2-c]isoxazolyl, 3a,4-dihydro-3H-chromeno[4,3-
c]isoxazolyl, 5,5-dioxide-3a,4-dihydro-3H-thiochromeno[4,3-c]isoxazolyl, 2,3,3a,4-
tetrahydrochromeno[4,3-c]pyrazolyl, 6,6-dioxide-2,3-dihydro-5H-[1,4]dithiino[2,3-
c]thiochromenyl, 5,5-dioxide-2,3,3a,4-tetrahydrothiochromeno[4,3-c]pyrazolyl, 1',1'-
dioxide-2',3'-dihydrospiro[1,3-dioxolano-2,4'-thiochromen]-yl, 1,1,4,4-tetraoxide-2,3-
dihydro-1,4-benzodithiin-6-yl, 4,4-dioxide-2,3-dihydro-1,4-benzoxathiin-7-yl, 1,1-
dioxide-3-oxo-2,3-dihydro-1,2-benzoisothiazol-5-yl, 4-(alkoxyimino)-1,1-dioxide-
3,4-dihydro-2H-thiochromen-6-yl, 1,1-dioxide-4-oxo-3,4-dihydro-2H-thiochromen-6-
yl, 2,3-dihydro-1,4-benzoxathiin-7-yl, with said heterocyclic groups optionally
substituted by one or more substituents selected from halogen; NO₂; CN; CHO; OH;
linear or branched C₁-C₆ alkyl; linear or branched C₁-C₆ haloalkyl; linear or branched
C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₁-C₆ cyanoalkyl; C₂-C₆
alkoxyalkyl; C₂-C₆ alkylthioalkyl; C₂-C₆ alkyl sulfinylalkyl; C₂-C₆ alkylsulfonylalkyl;
C₂-C₆ haloalkoxyalkyl; C₂-C₆ haloalkylthioalkyl; C₂-C₆ haloalkylsulfinylalkyl; C₂-C₆
haloalkylsulfonylalkyl; C₂-C₆ alkoxyalkoxyl or C₂-C₆ haloalkoxyalkoxyl optionally
substituted with a group selected from C₁-C₄ alkoxy or C₁-C₄ haloalkoxy; C₂-C₆
alkylthioalkoxyl; C₂-C₆ haloalkylthioalkoxyl; C₃-C₁₂ dialkoxyalkyl; C₃-C₁₂
dialkylthioalkyl; C₃-C₁₂ dialkylthioalkoxyl; C₃-C₁₂ dialkoxyalkoxyl; C₂-C₆
haloalkoxyhaloalkoxyl; C₃-C₁₀ alkoxyalkoxyalkyl; C₂-C₆ alkenyl; C₂-C₆ haloalkenyl;
C₂-C₆ alkenyloxy; C₂-C₆ haloalkenyloxy; C₃-C₈ alkenyloxyalkoxyl; C₃-C₈
haloalkenyloxyalkoxyl; C₂-C₆ alkynyl; C₂-C₆ haloalkynyl; C₂-C₆ alkynyloxy; C₂-C₆
haloalkynyloxy; C₃-C₈ alkynyloxyalkoxyl; C₃-C₈ haloalkynyloxyalkoxyl; C₃-C₁₂
acylaminoalkoxy; C₂-C₈ alkoxyiminoalkyl; C₂-C₈ haloalkoxyiminoalkyl; C₃-C₈
alkenyloxyiminoalkyl; C₃-C₈ haloalkenyloxyiminoalkyl; C₃-C₈
alkynyloxyiminoalkyl; C₃-C₈ haloalkynyloxyiminoalkyl; C₅-C₃₀ alkoxyalkynyloxy;
C₆-C₁₂ cycloalkylideneiminoalkyl; C₆-C₁₂ dialkylideneiminoalkyl; —S(O)_mR₁;

Application Number: 10/573,052
 Examiner: HAVLIN, ROBERT H

—OS(O)_nR₁; —SO₂NR₂R₃; —CO₂R₄; —COR₅; —CONR₆R₇; —CSNR₈R₉; —
 NR₁₀R₁₁; —NR₁₂COR₁₃; —NR₁₄CO₂R₁₅; —NR₁₆CONR₁₇R₁₈; —PO(R₁₉)₂; —Q; —ZQ₁;
 —(CR₂₀R₂₁)_pQ₂; —Z(CR₂₂R₂₃)_pQ₃; —(CR₂₄R₂₅)_pZQ₄; —(CR₂₆R₂₇)_pZ(CR₂₉R₂₉)_qQ₅; —
 (CR₃₀R₃₁)_pZ(CR₃₂R₃₃)_qZ₁Q₆; —Z₂(CR₃₄R₃₅)_p(C=Y)T; —Z₃(CR₃₆R₃₇); (CR₃₈R₃₉
 =CR₄₀R₄₁)(C=Y)T;

—B represents a D-(R_x)_n group;

—R represents a hydrogen atom; a linear or branched C₁-C₆ alkyl group; a linear or branched C₁-C₆ haloalkyl group; a C₃-C₆ cycloalkyl or C₄-C₁₂ cyclo-alkylalkyl group optionally substituted with halogen atoms or C₁-C₆ alkyl or C₁-C₆ thioalkyl or C₁-C₆ alkoxy or C₂-C₆ alkoxy carbonyl groups; C₂-C₆ alkenyl groups; C₂-C₆ alkynyl groups; the latter two groups; in turn; optionally substituted with halogen atoms; a C₅-C₆ cycloalkenyl group optionally substituted with halogen atoms or C₁-C₆ alkyl groups;

—R₁ and R₁₉ represent a C₁-C₆ alkyl group or a C₁-C₆ haloalkyl group; a C₃-C₆ cycloalkyl group; an aryl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₃-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxy carbonyl;

—m is equal to 0, 1 or 2;

—t is equal to 1 or 2;

—R₂, R₃, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₇ and R₁₈, the same or different, represent a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₁-C₆ alkoxy group; a C₃-C₆ cycloalkyl group; an arylalkyl group or an aryl group; said arylalkyl and aryl groups also optionally substituted by

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxycarbonyl, or, together with the group bonded to the same N atom, they jointly represent a C₂-C₅ alkylene group;

-R₄, R₅ and R₄₂ represent a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₃-C₆ alkenyl group in turn optionally substituted with halogen atoms; a Q₇ group, an arylalkyl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₁-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxycarbonyl;

-R₁₂, R₁₄ and R₁₆ represent a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₃-C₆ cycloalkyl group; a C₁-C₆ alkoxy group; a C₁-C₆ haloalkoxy group;

-R₁₃ and R₁₅ represent a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₃-C₆ alkenyl group in turn optionally substituted with halogen atoms; a Q₇, NH₂, NHCN, NFINH₂, NHOH group, an arylalkyl group optionally substituted by one or more substituents selected from halogen, NO₂, CN, CHO, linear or branched C₃-C₆ alkyl, linear or branched C₁-C₆ haloalkyl, linear or branched C₁-C₆ alkoxy, linear or branched C₁-C₆ haloalkoxy, C₁-C₆ alkylsulfonyl, C₂-C₆ alkoxycarbonyl;

R₂₀, R₂₁, R₂₂, R₂₃, R₂₄, R₂₅, R₂₆, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₂, R₃₃, R₃₄, R₃₅, R₃₆, R₃₇, R₃₈, R₃₉, R₄₀ and R₄₁, the same or different, represent: a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₁-

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

C₆ alkoxy group; or the two groups attached to the same carbon atom can be joined to each other by C₂-C₅ alkylene groups, the alkylene groups can in turn be substituted with C₁-C₃ alkyl groups;

-Q, Q₁, Q₂, Q₃, Q₄, Q₅, Q₆ and Q₇ represent an aryl group; a C₃-C₆ cycloalkyl group; a C₅-C₆ cycloalkenyl group; a heterocyclic group selected from triazolyl; triazolonyl; pyrazolyl; imidazolyl; imidazolidinonyl; tetrazolyl; tetrazolonyl; isoxazolyl; furyl; thienyl; pyrrolyl; pyrrolidinyl; pyrrolidinonyl; pyridyl; pyrimidinyl; pyrimidinonyl; pyrazinyl; pyridazinyl; oxazolyl; thiazolyl; oxadiazolyl; thiadiazolyl; isothiazolyl; benzoxazolyl; benzothiazolyl; isoxazoliny; 1,3-dioxanyl; 1,4-dioxanyl; 1,3-dioxolanyl; tetrahydropyranyl; oxethanyl; oxyranyl; thiazolidinyl; oxazolidinyl; piperidinyl; piperidinonyl; piperazinyl; morpholinyl; thiazinyl; tetrahydrofuranyl; dioxazolyl; tetrahydrofuroisoxazolyl; 2-oxa-3-azabicyclo[3.1.0]hex-3-enyl; said groups optionally substituted by one or more substituents selected from halogen: NO₂, OH, CN, CHO; linear or branched C₁-C₆ alkyl; linear or branched C₁-C₆ haloalkyl; linear or branched C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₁-C₆ cyanoalkyl; C₂-C₆ alkoxyalkyl; C₂-C₆ alkylthioalkyl; C₂-C₆ alkylsulfinylalkyl; C₂-C₆ alkylsulfonylalkyl; C₂-C₆ haloalkoxyalkyl; C₂-C₆ haloalkylthioalkyl; C₂-C₆ haloalkylsulfinylalkyl; C₂-C₆ haloalkylsulfonylalkyl; C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy optionally substituted with a group selected from C₁-C₄ alkoxy or C₁-C₄ haloalkoxy; C₂-C₆ alkylthioalkoxy; C₂-C₆ haloalkylthioalkoxy; C₃-C₁₂ dialkoxyalkyl; C₃-C₁₂ dialkylthioalkyl; C₃-C₁₂ dialkylthioalkoxy; C₃-C₁₂ dialkoxyalkoxy; C₂-C₆ haloalkoxyhaloalkoxy; C₃-C₁₀ alkoxyalkoxyalkyl; C₂-C₆ alkenyl; C₂-C₆ haloalkenyl; C₂-C₆ alkenyloxy; C₂-C₆ haloalkenyloxy; C₃-C₈ alkenyloxyalkoxy; C₃-C₈ haloalkenyloxyalkoxy; C₂-C₆ alkynyl; C₂-C₆ haloalkynyl; C₂-C₆ alkynyloxy; C₂-C₆ haloalkynyloxy; C₃-C₈ alkynyloxyalkoxy; C₃-C₈ haloalkynyloxyalkoxy; C₃-C₁₂ acylaminoalkoxy; C₂-C₈ alkoxyiminoalkyl; C₂-C₈ haloalkoxyiminoalkyl; C₃-C₈ alkenyloxyiminoalkyl; C₃-C₈ haloalkenyloxyiminoalkyl; C₃-C₈ alkynyloxyiminoalkyl; C₃-C₈ haloalkynyloxyiminoalkyl; C₅-C₁₀

Application Number: 10/573,052
 Examiner: HAVLIN, ROBERT H

alkoxyalkynyloxy; C₆-C₁₂ cycloalkylideneiminooxyalkyl; C₆-C₁₂
 dialkylideneiminooxyalkyl; aryl optionally substituted; —S(O)_mR₁; —OS(O)_nR₁; —
 SO₂NR₂R₃; —CO₂R₄; —COR₅; —CONR₆R₇; —CSNR₈R₉; —NR₁₀R₁₁; —
 NR₁₂COR₁₃; —NR₁₄CO₂R₁₅; —NR₁₆CONR₁₇R₁₈; —PO(R₁₉)₂; -
 Z₂(CR₃₄R₃₅)_p(C=Y)T; -Z₃(CR₃₆R₃₇)_v(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;

Z, Z₁, Z₂=O, S(O)_r;

Y=O, S;

r is equal to 0, 1 or 2;

p, q are equal to 1, 2, 3 or 4;

v is equal to 0 or 1;

Z₃=O, S or a direct bond;

T represents: a hydrogen atom; a Z₄R₄₂ group; a —NR₄₃R₄₄ group; an aryl group or a
 heterocyclic group selected from triazolyl; triazolonyl; pyrazolyl; imidazolyl;
 imidazolidinonyl; tetrazolyl; tetrazolonyl; pyrrolyl; pyrrolidinyl; pyrrolidinonyl;
 pyridyl; pyrimidinyl; piperidinyl; piperidinonyl; piperazinyl; morpholinyl; said aryl
 and heterocyclic groups optionally substituted by one or more substituents selected
 from halogen; NO₂; OH; CN; CHO; linear or branched C₁-C₆ alkyl; linear or
 branched C₁-C₆ haloalkyl; C₃-C₆ cycloalkyl; C₅-C₆ cycloalkenyl; linear or branched
 C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₃-C₆ cyanoalkyl; C₂-C₆
 alkoxyalkyl; C₂-C₆ alkylthioalkyl; C₂-C₆ alkylsulfinylalkyl; C₂-C₆ alkylsulfonylalkyl;
 C₂-C₆ haloalkoxyalkyl; C₂-C₆ haloalkylthioalkyl; C₂-C₆ haloalkylsulfinylalkyl; C₂-C₆
 haloalkylsulfonylalkyl; —S(O)_mR₁;

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

Z₄=O, S or a direct bond;

R₄₃ and R₄₄, the same or different, represent: a hydrogen atom; a linear or branched C₁-C₆ alkyl group in turn optionally substituted with halogen atoms; a C₃-C₆ alkenyl group in turn optionally substituted with halogen atoms; a Q₇ group; an arylalkyl group optionally substituted by one or more substituents selected from halogen; NO₂; CN; CHO; linear or branched C₁-C₆ alkyl; linear or branched C₁-C₆ haloalkyl; linear or branched C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₁-C₆ alkylsulfonyl; C₂-C₆ alkoxy carbonyl; or they jointly represent a C₂-C₅ alkylene chain;

D represents: a monocyclic heterocyclic group of the heteroaryl type, ~~which can be mono or polycyclic~~ and can be connected to the rest of the structure either through one of its carbon atoms or, when possible, through one of its nitrogen atoms;

R_x represents a substituent selected from: hydrogen; halogen; NO₂; CN; CHO; OH; linear or branched C₁-C₆ alkyl; linear or branched C₁-C₆ haloalkyl; linear or branched C₁-C₆ alkoxy; linear or branched C₁-C₆ haloalkoxy; C₁-C₆ cyanoalkyl; C₂-C₆ alkoxyalkyl; C₂-C₆ alkylthioalkyl; C₂-C₆ alkylsulfonylalkyl; C₂-C₆ alkylsulfonylalkyl; C₂-C₆ haloalkoxyalkyl; C₂-C₆ haloalkylthioalkyl; C₂-C₆ haloalkylsulfonylalkyl; C₂-C₆ haloalkylsulfonylalkyl; C₂-C₆ alkoxyalkoxy or C₂-C₆ haloalkoxyalkoxy optionally substituted with a group selected from C₁-C₄ alkoxy or C₁-C₄ haloalkoxy; C₂-C₆ haloalkylthioalkoxy; C₃-C₁₂ dialkoxyalkyl; C₃-C₁₂ dialkylthioalkyl; C₃-C₁₂ dialkylthioalkoxy; C₃-C₁₂ dialkoxyalkoxy; C₂-C₆ haloalkoxyhaloalkoxy; C₃-C₁₀ alkoxyalkoxyalkyl; C₂-C₆ alkenyl; C₂-C₆ haloalkenyl; C₂-C₆ alkenyloxy; C₂-C₆ haloalkenyloxy; C₃-C₈ alkenyloxyalkoxy; C₃-C₈ haloalkenyloxyalkoxy; C₂-C₆ alkynyl; C₂-C₆ haloalkynyl; C₂-C₆ alkynyloxy; C₂-C₆ haloalkynyloxy; C₃-C₈ alkynyloxyalkoxy; C₃-C₈ haloalkynyloxyalkoxy; C₃-C₁₂ acylaminoalkoxy; C₂-C₈ alkoxyiminoalkyl; C₂-C₈ haloalkoxyiminoalkyl; C₃-C₈

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

alkenyloxyiminoalkyl; C₃-C₈ haloalkenyloxyiminoalkyl; C₃-C₈
alkynyloxyiminoalkyl; C₃-C₈ haloalkynyloxyiminoalkyl; C₅-C₁₀ alkoxyalkynyloxy;
C₆-C₁₂ cycloalkylideneiminooxyalkyl; C₆-C₁₂ dialkylideneiminooxyalkyl; —S(O)_mR₁;
—OS(O)_nR₁; —SO₂NR₂R₃; —CO₂R₄; —COR₅; —CONR₆R₇; —CSNR₈R₉; —
NR₁₀R₁₁; —NR₁₂COR₁₃; —NR₁₄CO₂R₁₅; —NR₁₆CONR₁₇R₁₈; —PO(R₁₉)₂; —Q; —ZQ;
—(CR₂₀R₂₁)_pQ₂; —Z(CR₂₂R₂₃)_pQ₃; —(CR₂₄R₂₅)_pZQ₄; —(CR₂₆R₂₇)_pZ(CR₂₈R₂₉)_qQ₅;
—(CR₃₀R₃₁)_pZ(CR₃₂R₃₃)_qZ₁Q₆; —Z₂(CR₃₄R₃₅)_p(C=Y)T; —
Z₃(CR₃₆R₃₇)_p(CR₃₈R₃₉=CR₄₀R₄₁)(C=Y)T;
if several R_x groups are present, these can be the same or different;

n=1-9;

excluding the following compounds having general formula (I) wherein A, B and R
have the following meanings: A=4-chlorophenyl, B=1-methylimidazol-2-yl, R=H;
A=4-nitrophenyl, B=1-(2-hydroxyethyl)-5-nitroimidazol-2-yl, R=H; A=phenyl,
B=1H-benzimidazol-2-yl, R=C₂H₅; A=phenyl, B=4H-1-benzopyran-4-yl, R=CH₃;
A=4-nitrophenyl, B=3-(4-methylphenyl)-1,2,4-oxadiazol-5-yl, R=CH₃; A=phenyl,
B=4-chloro-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl, R=CH₃; A=phenyl, B=2-acetyl-
1,2,3,4-tetrahydroisoquinolin-1-yl, R=C₂H₅; A=2-hydroxy-4-methoxyphenyl,
B=thiazol-4-yl, R=CH₃; A=phenyl, B=2,5-diphenyl-1,3-oxathiol-2-yl, R=CH₃; A=4-
nitrophenyl, B=4,6-bis(dimethylamino)-1,3,5-triazin-2-yl, R=CH₃; A=phenyl,
B=furan-2-yl, R=CH₃; A=phenyl, B=1,3-dithian-2-yl, R=CH₃; A=phenyl, B=4-
chlorothien-2-yl, R=H; A=phenyl, B=5-bromothien-2-yl, R=H; A=phenyl, B=5-
methylthien-2-yl, R=H; A=phenyl, B=6-phenylpyrazin-2-yl, R=CH₃; A=phenyl,
B=3,4-dihydro-3-methyl-2-oxo-2H-1,3-benzo-oxazin-4-yl, R=CH₃; A=phenyl,
B=benzothiazol-2-yl, R=CH₃; A=2-hydroxy-4-methoxyphenyl, B=2-phenylthiazol-4-
yl, R=CH₃; A=phenyl, B=5-methylfuran-2-yl, R=CH₃; A=phenyl, B=3-(4-
methylphenyl)-1,2,4-oxadiazol-5-yl, R=CH₃; A=phenyl, B=tetrahydrofuran-2-yl,
R=CH₃; A=phenyl, B=2,3-dihydro-3-hydroxy-2-oxo-1H-indol-3-yl, R=CH₃;
A=phenyl, B=4-chloro-1-methyl-2,5-dioxo-2,5-dihydro-pyrrol-3-yl, R=CH₃;
A=phenyl, B=2,2-trifluoroacetyl-1,2,3,4-tetrahydroiso-quinolin-1-yl, R=C₂H₅;

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

A=phenyl, B=2-acetyl-1,2,3,4-tetrahydroisoquinolin-1-yl, R=CH₃;
A=4-nitrophenyl, B=2-(4-nitrophenyl)-3,5,6-triphenyl-pyridin-4-yl, R=CH₃;
A=phenyl, B=4,6-bis(dimethylamino)-1,3,5-triazin-2-yl, R=CH₃;
A=phenyl, B=4-methoxy-5-tert-butoxycarbonyl-1H-pyrro-2-yl, R=CH₃;
A=phenyl, B=1,3-dihydro-3-oxo-isobenzofuran-1-yl, R=CH₃; A=phenyl, B=(5-methoxycarbonylmethyl)thien-2-yl, R=H; A=phenyl, B=4-methylthien-2-yl, R=H;
A=phenyl, B=1,4-dihydro-1-methyl-3-nitroquinolin-4-yl, R=H; A=phenyl, B=thien-2-yl, R=H; A=phenyl, B=6-methylbenzothiazol-2-yl, R=CH₃; A=2-methoxycarbonylphenyl, B=phenyl, R=CH₃; A=2-benzyloxy-4-methoxyphenyl, B=2,3,4-trimethoxyphenyl, R=H; A=4,5-dimethoxy-2-nitrophenyl, B=3,4-dimethoxyphenyl, R=H; A=2-nitrophenyl, B=phenyl, R=H; A=2,4,5-trimethoxyphenyl, B=4-methoxyphenyl, R=H; A=4-bromophenyl, B=phenyl, R=H; A=4-bromophenyl, B=2,4-dinitrophenyl, R=CH₃; A=4-chlorophenyl, B=phenyl, R=H; A=2,4-dibenzyloxy-5-methoxyphenyl, B=1,3-benzodioxol-5-yl, R=H; A=4-methoxyphenyl, B=2-carboxyphenyl, R=H; A=4-methylphenyl, B=2,4-dinitrophenyl, R=CH₃; A=4-hydroxy-3-methoxyphenyl, B=4-hydroxy-3-methoxyphenyl, R=H; A=2-nitrophenyl, B=4-methylphenyl, R=H; A=4-chlorophenyl, B=4-chlorophenyl, R=H; A=2,4-diacetoxyphenyl, B=phenyl, R=CH₃; A=3-methoxyphenyl, B=phenyl, R=C₂R₅; A=4-nitrophenyl, B=phenyl, R=H; A=2-nitrophenyl, B=4-n-butoxyphenyl, R=H; A=2-nitro-4-chlorophenyl, B=4-methylphenyl, R=H; A=phenyl, B=8-carboxynaphthalenyl, R=CH₃; A=2,5-dimethoxyphenyl, B=2-hydroxyphenyl, R=C₂R₅; A=4-fluorophenyl, B=2-nitro-4-trifluoromethylphenyl, R=CH₃; A=3-chloro-4-methylphenyl, B=2,4-dinitrophenyl, R=CH₃; A=2-nitro-4-chlorophenyl, B=phenyl, R=H; A=4,5-dimethoxy-2-nitrophenyl, B=4-methylphenyl, R=H; A=2-carboxy-6-nitrophenyl, B=phenyl, R=CH₃; A=2,4,5-trimethoxyphenyl, B=3-methoxyphenyl, R=H; A=phenyl, B=4-bromophenyl, R=H; A=6-benzyloxy-2,3,4-trimethoxyphenyl, B=1,3-benzodioxol-5-yl, R=H; A=4,5-dimethoxy-2-

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

nitrophenyl, B=4-methoxyphenyl, R=H; A=4,5-dimethoxy-2-nitrophenyl, B=4-chlorophenyl, R=H; A=2,4-dibenzyloxyphenyl, B=4-methoxyphenyl, R=H; A=4-methylphenyl, B=4-methylphenyl, R=H; A=4-dimethylaminophenyl, B=phenyl, R=H; A=4-methoxyphenyl, B=phenyl, R=H; A=4,5-dichloro-2-nitrophenyl, B=4-chlorophenyl, R=H; A=2-nitrophenyl, B=4-methoxyphenyl, R=H; A=phenyl, B=2,5-dimethoxycarbonylaminophenyl, R=CH₃; A=4-hydroxy-4-methoxyphenyl, B=2-methoxyphenyl, R=H; A=phenyl, B=4-methylphenyl, R=H; A=2-nitrophenyl, B=4-ethoxyphenyl, R=H; A=2-nitro-4-chlorophenyl, B=4-methoxyphenyl, R=H; A=4-chlorophenyl, B=phenyl, R=C₂H₅; A=2-tert-butoxycarbonyl-5-ethyl-4-methoxyphenyl, B=2,3-dihydro-7-methyl-1,4-benzodioxin-6-yl, R=t-butyl; A=phenyl, B=2-nitro-4-trifluoromethylphenyl, R=CH₃; A=3,4-dichlorophenyl, B=2,4-dinitrophenyl, R=CH₃; A=4,5-dichloro-2-nitrophenyl, B=4-methoxyphenyl, R=H; A=4-methoxy-2-nitrophenyl, B=4-methylphenyl, R=H; A=phenyl, B=anthracene-9-yl, R=CH₃; A=phenyl, B=4-methoxyphenyl, R=H; A=2,4,5-trimethoxyphenyl, B=phenyl, R=H; A=2,4-diacetoxyphenyl, B=2,4,5-trimethoxyphenyl, R=CH₃; A=2-hydroxyphenyl, B=phenyl, R=H; A=4-methoxy-2-nitrophenyl, B=phenyl, R=H; A=4,5-dimethoxy-2-nitrophenyl, B=phenyl, R=H; A=2,4-dinitrophenyl, B=phenyl, R=CH₃; A=phenyl, B=phenyl, R=CH₃; A=phenyl, B=4-dimethylaminophenyl, R=H; A=phenyl, B=2,4-dinitrophenyl, R=CH₃; A=4,5-dichloro-2-nitrophenyl, B=4-methylphenyl, R=H; A=4-bromophenyl, B=phenyl, R=CH₃; A=2-(4-methylphenylsulfonyloxy)-6-methoxyphenyl, B=phenyl, R=H; A=4-methylsulfonylphenyl, B=2-methoxyphenyl, R=CH₃; A=4-methoxyphenyl, B=4-methoxyphenyl, R=CH₃; A=phenyl, B=4-chlorophenyl, R=H; A=2-nitrophenyl, B=4-nitrophenyl, R=H; A=phenyl, B=phenyl, R=H; A=2,4-dimethoxyphenyl, B=4-methoxyphenyl, R=H; A=2-nitrophenyl, B=4-n-hexyloxyphenyl, R=H; A=4-methoxy-2-nitrophenyl, B=4-methoxyphenyl, R=H; A=phenyl, B=9-carboxyphenanthren-10-yl, R=CH₃;

Application Number: 10/573,052
Examiner: HAVLIN, ROBERT H

A=phenyl, B=phenyl, R=CH₃; A=3,4-dimethoxyphenyl, B=3,4-dimethoxyphenyl, R=H; A=2,4-dimethoxyphenyl, B=phenyl, R=H; A=phenyl, B=2-hydroxy-3,4,6-trimethyl-5-methoxyphenyl, R=CH₃; A=4-chloro-2-nitrophenyl, B=4-chlorophenyl, R=H; A=2-nitrophenyl, B=4-chlorophenyl, R=H; A=2,4,5-trimethoxyphenyl, B=3,4-dimethoxyphenyl, R=H; A=4-chlorophenyl, B=2,4-dinitrophenyl, R=CH₃; A=4,5-dichloro-2-nitrophenyl, B=phenyl, R=H; A=4-methoxyphenyl, B=phenyl, R=CH₃; A=2,4-dibenzoyloxyphenyl, B=3,4-dimethoxyphenyl, R=H; A=4-methylthiophenyl, B=4-methoxyphenyl, R=CH₃; A=phenyl, B=phenyl, R=C₂H₅; A=4-methoxyphenyl, B=2,4-dinitrophenyl, R=CH₃; A=2-nitrophenyl, B=3-chlorophenyl, R=H; A=2-nitrophenyl, B=3,4-dimethoxyphenyl, R=H; A=4-methoxyphenyl, B=4-methoxyphenyl, R=H; A=2-hydroxyphenyl, B=4-methoxyphenyl, R=H; A=phenyl, B=2,5-bis(phenacylamino)phenyl, R=CH₃; A=4-nitrophenyl, B=4-methylphenyl, R=H; A=2-nitrophenyl, B=4-n-pentyloxyphenyl, R=H; A=4-methoxy-2-nitrophenyl, B=4-chlorophenyl, R=H; A=phenyl, B=2-carboxynaphthalen-1-yl, R=CH₃.

18 (Canceled)